

REMARKS/ARGUMENTS

Reconsideration of the above-identified application in view of the present amendment is respectfully requested.

By the present amendment, claim 31, corresponding to claim 3 rewritten in independent form, has been added. Claims 6 and 7 have been amended to preserve proper dependency. Claim 3 has been cancelled. Claims 32-41 have been added. Allowance of claims 5 and 16-30 is noted.

Claim 3 was rejected as depending from a rejected claim and was indicated as being allowable if rewritten in independent form. Accordingly, claim 31, which corresponds to claim 3 rewritten in independent form, is allowable.

Claim 6 and 7 depend from claim 31 and are allowable for the specific recitations therein and for the same reasons as claim 31.

It is respectfully submitted that claims 1, 8-15, and 32-41 are allowable. Specifically, claim 1 recites an apparatus including a longitudinal member connectable with a bone portion. A fastener engageable with the bone portion having a longitudinal axis connects the longitudinal member to the bone portion. A housing has a first passage through which the longitudinal member extends. The housing has a second passage with a longitudinal axis extending transverse to the first passage. The fastener extends through an opening in the housing into the second passage and is movable relative to the housing. The longitudinal axis of the fastener is positionable in any one of a plurality of angular positions relative to the longitudinal axis of the second passage. A spacer received in the second passage of the housing is engageable with the fastener and the longitudinal member. A member fixedly connected to the housing extends from the housing into engagement

with the spacer to maintain the spacer in frictional engagement with the fastener to prevent relative movement between the fastener and the housing when the longitudinal member is disengaged from the spacer and the spacer engages the fastener. The fastener and the housing are manually movable relative to each other in opposition to the frictional engagement when the longitudinal member is disengaged from the spacer. A clamping mechanism clamps the longitudinal member, the spacer, and the housing to the fastener to prevent movement of the fastener relative to the housing. None of the cited prior art describes or suggests an apparatus as set forth in claim 1.

U.S. Patent No. 6,440,137 to Horvath et al. discloses a fastening apparatus with a fastener body 10. The body 10 has a groove 30 for receiving a rod 40. A threaded shaft 110 is pivotable relative to the body 10. A washer 120 has a spherical surface 126 that engages a spherical surface 112 on the shaft 110. Inwardly protruding upsets 12 on the body 10 engage grooves 122 on the washer 120 to capture the washer within the fastener body.

The inwardly protruding upsets 12 on the body 10 engage the grooves 122 on the washer 120 to capture the washer within the fastener body, see column 3, lines 27-30. The Horvath et al. patent does not describe or suggest that the upsets 12 prevent relative movement between the shaft 110 and the body 10 when the rod 40 is disengaged from the washer 120 and the washer engages the shaft. The washer 120 described in the Horvath et al. patent has a spherical surface 126 that engages a spherical surface 112 on the shaft 110 whereby the spherical surface 112 on the shaft and the spherical surface 126 on the washer are able to move in rotational communion with the spherical surfaces in contact, see column 3,

line 42 to column 4, line 5. Accordingly, the shaft 110 moves relative to the washer 120 and the body 10 when the washer 120 is in engagement with the shaft 110 and the upsets 12 capture the washer within the body 10. Accordingly, the Horvath et al. patent does not describe or suggest a member fixedly connected to a housing and extending from the housing into engagement with a spacer to maintain the spacer in frictional engagement with the fastener to prevent relative movement between the fastener and the housing when a longitudinal member is disengaged from the spacer and the spacer engages the fastener. Thus, claim 1 is allowable.

Claim 8 recites that the fastener includes a first part spherical surface engageable with a part spherical surface of the housing. None of the cited prior art describes or suggests a fastener including a first part spherical surface engageable with a part spherical surface of a housing and including all the limitations of claim 1. Therefore, claim 8 is also allowable.

Claim 9 recites that the fastener includes a second part spherical surface engageable with the spacer. None of the cited prior art describes or suggests a fastener having a second part spherical surface engageable with a spacer and including all the limitations of claims 1 and 8. Therefore, claim 9 is allowable.

Claim 10 recites that the fastener includes a surface engageable with the spacer to limit relative movement between the fastener and the housing. None of the cited prior art describes or suggests a fastener including a surface engageable with a spacer to limit relative movement between a fastener and a housing and including all the limitations of claims 1, 8, and 9. Thus, claim 10 is allowable.

Claim 11 recites that the second part spherical surface has a diameter smaller than a diameter of said first part spherical surface. The surface engageable with the

spacer to limit relative movement between the fastener and the housing extends between the first and second part spherical surfaces. None of the cited prior art describes or suggests an apparatus as set forth in claim 11 and including all the limitations of claims 1 and 8-10. Therefore, claim 11 is also allowable.

Claim 12 recites that the spacer has an opening through which a tool extends to engage the fastener when the longitudinal member is disengaged from the spacer. None of the cited prior art describes or suggests a spacer having an opening through which a tool extends to engage a fastener when a longitudinal member is disengaged from a spacer and including the limitations of claim 1. Thus, claim 12 is allowable.

Claim 13 recites that the clamping mechanism includes a threaded member threadably engageable with the housing. None of the cited prior art describes or suggests a clamping mechanism including a threaded member threadably engageable with a housing and including all the limitations of claim 1. Therefore, claim 13 is also allowable.

Claim 14 recites that the threaded member engages the longitudinal member to clamp the longitudinal member against the spacer. None of the cited prior art describes or suggests a threaded member engaging a longitudinal member to clamp the longitudinal member against a spacer and including all the limitations of claims 1 and 13. Thus, claim 14 is also allowable.

Claim 15 recites that the threaded member and the housing have a buttress thread. None of the cited prior art describes or suggests a threaded member and a housing having a buttress thread and including all the limitations of claims 1 and 13. Thus, claim 15 is allowable.

Claim 32 recites an apparatus including a longitudinal member connectable with a bone portion. A fastener engageable with the bone portion having a longitudinal axis connects the longitudinal member to the bone portion. A housing has a first passage through which the longitudinal member extends. The housing has a second passage with a longitudinal axis extending transverse to the first passage. The fastener extends through an opening in the housing into the second passage and is movable relative to the housing. The longitudinal axis of the fastener is positionable in any one of a plurality of angular positions relative to the longitudinal axis of the second passage. A spacer received in the second passage of the housing is engageable with the fastener and the longitudinal member. A member fixedly connected to the housing extends from the housing into engagement with the spacer to maintain the spacer in frictional engagement with the fastener. The member includes means for preventing relative movement between the fastener and the housing when the longitudinal member is disengaged from the spacer and the spacer engages the fastener. The fastener and the housing are manually movable relative to each other upon application of a force in opposition to the frictional engagement when the longitudinal member is disengaged from the spacer. A clamping mechanism clamps the longitudinal member, the spacer, and the housing to the fastener to prevent movement of the fastener relative to the housing. None of the cited prior art describes or suggests an apparatus as set forth in claim 32.

As discussed above, the inwardly protruding upsets 12 on the body 10 described in the Horvath et al. patent engage the grooves 122 on the washer 120 to capture the washer within the fastener body, see column 3, lines 27-30. The Horvath et al. patent does not describe or suggest that the upsets 12 prevent relative

movement between the shaft 110 and the body 10 when the rod 40 is disengaged from the washer 120 and the washer engages the shaft. The washer 120 described in the Horvath et al. patent has a spherical surface 126 that engages a spherical surface 112 on the shaft 110 whereby the spherical surface 112 on the shaft and the spherical surface 126 on the washer are able to move in rotational communion with the spherical surfaces in contact, see column 3, line 42 to column 4, line 5.

Accordingly, the shaft 110 moves relative to the washer 120 and the body 10 when the washer 120 is in engagement with the shaft 110 and the upsets 12 capture the washer within the body 10. Accordingly, the Horvath et al. patent does not describe or suggest a member fixedly connected to a housing and extending from the housing into engagement with a spacer to maintain the spacer in frictional engagement with the fastener and including means for preventing relative movement between the fastener and the housing when a longitudinal member is disengaged from the spacer and the spacer engages the fastener. Thus, claim 32 is allowable.

Claim 33 recites that the fastener includes a first part spherical surface engageable with a part spherical surface of the housing. None of the cited prior art describes or suggests a fastener including a first part spherical surface engageable with a part spherical surface of a housing and including all the limitations of claim 32. Therefore, claim 33 is also allowable.

Claim 34 recites that the fastener includes a second part spherical surface engageable with the spacer. None of the cited prior art describes or suggests a fastener having a second part spherical surface engageable with a spacer and including all the limitations of claims 32 and 33. Therefore, claim 34 is allowable.

Claim 35 recites that the fastener includes a surface engageable with the spacer to limit relative movement between the fastener and the housing. None of the cited prior art describes or suggests a fastener including a surface engageable with a spacer to limit relative movement between a fastener and a housing and including all the limitations of claims 32, 33, and 34. Thus, claim 35 is allowable.

Claim 36 recites that the second part spherical surface has a diameter smaller than a diameter of said first part spherical surface. The surface engageable with the spacer to limit relative movement between the fastener and the housing extends between the first and second part spherical surfaces. None of the cited prior art describes or suggests an apparatus as set forth in claim 36 and including all the limitations of claims 32 and 33-35. Therefore, claim 36 is also allowable.

Claim 37 recites that the spacer has an opening through which a tool extends to engage the fastener when the longitudinal member is disengaged from the spacer. None of the cited prior art describes or suggests a spacer having an opening through which a tool extends to engage a fastener when a longitudinal member is disengaged from a spacer and including the limitations of claim 32. Thus, claim 37 is allowable.

Claim 38 recites that the clamping mechanism includes a threaded member threadably engageable with the housing. None of the cited prior art describes or suggests a clamping mechanism including a threaded member threadably engageable with a housing and including all the limitations of claim 32. Therefore, claim 38 is also allowable.

Claim 39 recites that the threaded member engages the longitudinal member to clamp the longitudinal member against the spacer. None of the cited prior art

describes or suggests a threaded member engaging a longitudinal member to clamp the longitudinal member against a spacer and including all the limitations of claims 32 and 38. Thus, claim 39 is also allowable.

Claim 40 recites that the threaded member and the housing have a buttress thread. None of the cited prior art describes or suggests a threaded member and a housing having a buttress thread and including all the limitations of claims 32 and 38. Thus, claim 40 is allowable.


Claim 41 recites an apparatus including a longitudinal member connectable with a bone portion. A fastener engageable with the bone portion having a longitudinal axis connects the longitudinal member to the bone portion. A housing has a first passage through which the longitudinal member extends. The housing has a second passage with a longitudinal axis extending transverse to the first passage. The fastener extends through an opening in the housing into the second passage. The housing is movable relative to the fastener. The longitudinal axis of the second passage is positionable in any one of a plurality of angular positions relative to the longitudinal axis of the fastener. A spacer received in the second passage of the housing is engageable with the fastener and the longitudinal member. A member fixedly connected to the housing extends from the housing into engagement with the spacer. The member holds the spacer in frictional engagement with the fastener. The member holds the longitudinal axis of the second passage of the housing in any one of the plurality of positions relative to the longitudinal axis of the fastener when the longitudinal member is disengaged from the spacer and the spacer engages the fastener. The fastener and the housing are manually movable relative to each other in opposition to the frictional engagement when the longitudinal

member is disengaged from the spacer. A clamping mechanism clamps the longitudinal member, the spacer, and the housing to the fastener to prevent movement of the fastener relative to the housing. None of the cited prior art describes or suggests an apparatus as set forth in claim 41. Thus, claim 41 is allowable.

In view of the foregoing, it is respectfully submitted that the above-identified application is in condition for allowance, and allowance of the above-identified application is respectfully requested.

Please charge any deficiency or credit any overpayment in the fees for this amendment to our Deposit Account No. 20-0090.

Respectfully submitted,


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